

REMARKS

Claims 1-20 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 102

Claims 1 and 10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Myer et al. (U.S. Pat. No. 6,615,088). This rejection is respectfully traversed.

The Examiner relies on Myer et al. to teach a master controller that queries a new device to get its configuration information and creates or updates a generic configuration file for configuring internet appliances, so that the most recent version of the generic configuration file can be stored in the master controller and used to configure and reconfigure all devices of that type in a uniform manner. As best understood by Applicant, a user of the system of Myer et al. would not be able to configure a new device having different attributes from an old device by cloning an object for configuring the old device and modifying attributes of the cloned object for the new device. A new configuration file obtained from a new device of Meyer et al. that replaces an old configuration file will cause the old device to be reconfigured like the new device, so that the old and new devices are configured identically. Moreover, the user adding the new device of Meyer et al. is not permitted to modify any attributes of a copy of an old configuration file to create a new configuration file for a new device except by replacing the old configuration file with the new configuration file obtained from the new device. As a result, the old configuration file and the new configuration file of Meyer et al. are not both available for configuring the old device and the new device

differently. Further, replacement of the old configuration file with the new configuration file is contingent on the new device and the old device being of the same type, with identical attributes. Therefore, Myer et al. do not teach a master controller that clones attributes, parameters, and operations of a first I/O device in order to configure a second I/O device by creating a second I/O device object that is a copy of a first I/O device object, and accepts user input to modify any attributes of the second I/O device object that are different for said second I/O device, and sends the first and second device objects to the first and second I/O devices on the network, respectively.

Applicants' claimed invention is generally directed toward a system for cloning input/output (I/O) devices connected to a network of an industrial control system. In particular, Applicants' claimed invention is directed toward a master controller that clones attributes, parameters, and/or operations of a first I/O device in order to configure a second I/O device by creating a second I/O device object that is a copy of a first I/O device object, and accepts user input to modify any attributes of the second I/O device object that are different for said second I/O device, and sends the first and second device objects to the first and second I/O devices on the network, respectively. For example, independent claim 1, especially as amended, recites, "said master computer subsequently clones properties that include said one of attributes, parameters, and operations of said first I/O device in order to configure a second I/O device that is subsequently connected to said first network by creating a second I/O device object that is a copy of the first I/O device object, and accepting user input to modify at least one of said attributes of the second I/O device object that are different for said second I/O device, and said master computer sends the first and second device

objects to the first and second I/O devices on the network, respectively.” Independent claim 10, especially as amended, recites similar subject matter. Support for the amendments can be found in the originally filed specification at Figure 3 and related discussion at paragraphs [0030]-[0032]. Therefore, Myer et al. do not teach all of the limitations of the independent claims.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejections of independent claims 1 and 10 under 35 U.S.C. § 102(b), along with rejection on these grounds of all claims dependent therefrom.

REJECTION UNDER 35 U.S.C. § 103

Claims 2-9 and 11-20 stand rejected under 35 U.S.C. § 103(a) as being anticipated by Myer et al. (U.S. Pat. No. 6,615,088) in view of Chasmawala et al. (U.S. Pat. No. 6,845,416). This rejection is respectfully traversed.

The Examiner relies on Myer et al. to teach a master controller that queries a new device to get its configuration information and creates or updates a generic configuration file for configuring internet appliances, so that the most recent version of the generic configuration file can be stored in the master controller and used to configure and reconfigure all devices of that type in a uniform manner. As best understood by Applicants, a user of the system of Myer et al. is not able to configure a new device having different attributes from an old device by cloning an object for configuring the old device and modifying attributes of the cloned object for the new device. A new configuration file obtained from a new device of Meyer et al. that replaces an old configuration file will cause the old device to be reconfigured like the new device, so that the old and new devices are configured identically. Moreover, the

user adding the new device of Meyer et al. is not permitted to modify any attributes of a copy of an old configuration file to create a new configuration file for a new device except by replacing the old configuration file with the new configuration file obtained from the new device. As a result, the old configuration file and the new configuration file of Meyer et al. are not both available for configuring the old device and the new device differently. Further, replacement of the old configuration file with the new configuration file is contingent on the new device and the old device being of the same type, with identical attributes. Therefore, Myer et al. do not teach, suggest, or motivate a master controller that clones attributes, parameters, and operations of a first I/O device in order to configure a second I/O device by creating a second I/O device object that is a copy of a first I/O device object, and accepts user input to modify any attributes of the second I/O device object that are different for said second I/O device, and sends the first and second device objects to the first and second I/O devices on the network, respectively.

The Examiner relies on Chasmawala et al. to teach a controller area network with I/O devices and controller software having a hierarchical class structure with inheritance properties, each of which has attributes and methods. However, Chasmawalla et al. do not teach, suggest, or motivate a master controller that clones attributes, parameters, and operations of a first I/O device in order to configure a second I/O device by creating a second I/O device object that is a copy of a first I/O device object, and accepts user input to modify any attributes of the second I/O device object that are different for said second I/O device, and sends the first and second device objects to the first and second I/O devices on the network, respectively.

Applicants' claimed invention is generally directed toward a system for cloning input/output (I/O) devices connected to a network of an industrial control system. In particular, Applicants' claimed invention is directed toward a master controller that clones attributes, parameters, and/or operations of a first I/O device in order to configure a second I/O device by creating a second I/O device object that is a copy of a first I/O device object, and accepts user input to modify any attributes of the second I/O device object that are different for said second I/O device, and sends the first and second device objects to the first and second I/O devices on the network, respectively. For example, independent claim 1, especially as amended, recites, "said master computer subsequently clones properties that include said one of attributes, parameters, and operations of said first I/O device in order to configure a second I/O device that is subsequently connected to said first network by creating a second I/O device object that is a copy of the first I/O device object, and accepting user input to modify at least one of said attributes of the second I/O device object that are different for said second I/O device, and said master computer sends the first and second device objects to the first and second I/O devices on the network, respectively." Independent claim 10, especially as amended, recites similar subject matter. Support for the amendments can be found in the originally filed specification at Figure 3 and related discussion at paragraphs [0030]-[0032]. Therefore, Myer et al. and Chasmawala et al. do not teach, suggest, or motivate all of the limitations of the independent claims. These differences are significant.

Accordingly, Applicants respectfully request the Examiner reconsider and withdraw the rejection of claims 2-9 and 11-20 under 35 U.S.C. § 103(a) in view of their dependence from allowable base claims.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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